REMARKS

Claim Rejections - 35 USC § 112

Claims 1-8 and 14 have been rejected by the Examiner under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention for the reason that, in Claim 1, lines 3-4, the phrase "as hereinbefore defined" renders the claim indefinite because it is not known as to what text or drawing the phrase is referring.

Claim 1 has been amended to remove the phrase "as hereinbefore defined" and also to more clearly define "sphagnum material" as "sphagnum moss". Claim 5 has been amended to replace "sphagnum material" with "sphagnum moss".

Applicant acknowledges the election of Group I (Claims 1-8 and 14) and the withdrawal of Claims 9-13 from examination.

Claim Objections

The Examiner has objected to Claim 14 under 37 CFR 1.75(c) as being in improper form because it depends upon another multiple dependent claim (in the instant case - Claim 8).

Claim Rejections - 35 USC § 103

Before responding to the specific rejections under 35 U.S.C. 103(a), Applicant feels it to be necessary to point out to the Examiner that there is a significant difference between:

sphagnum moss	the living growing plant on the top of sphagnum peat bogs
sphagnum peat moss	dead partially decomposed sphagnum moss. This exists between the living moss and the peat at the base of the peat bog.

peat	dead and decomposed sphagnum moss that exists at the base of peat bogs.

In support of this argument, Applicant encloses the following publications for the Examiner's information and for entering into the file:

(a) "SPHAGNUM MOSS vs. SPHAGNUM PEAT MOSS." This is a freely available internet article, available on http://www.ext.vt.edu/departments/envirohort/articles/misc/sphagnum.html, which finishes with the phrase "Remember, sphagnum moss is NOT the same as the safe sphagnum peat moss...".

The article also references an article by GERRY HOOD, President of the Canadian Peat Moss Association, titled "DON'T CONFUSE SPHAGNUM MOSS WITH PEAT MOSS".

(b) A second internet article titled "IS THERE A PROBLEM WITH SPHAGNUM PEAT MOSS?", where it states, "Sphagnum peat moss is the dead, partially decomposed material that accumulates in the lower levels of the peat bog".

Sphagnum moss on the other hand is the living moss that grows on top of a sphagnum bog.

(c) A third internet printout from the HortSource.com website on the Canadian Sphagnum Peat Moss Association - here it is stated under the section titled "PEAT MOSS - WHAT IS IT? WHERE DOES IT COME FROM?", that "Canadian sphagnum peat moss (CSPM) is partially decomposed sphagnum moss" - clearly distinguishing it from sphagnum moss.

(d) "GROWING MEDIA & SOIL AMENDMENT", Student Handouts from the Canadian Sphagnum Peat Moss Association. This, on page 1, defines sphagnum peat, peat and sphagnum moss. Clearly indicating the difference peat and peat moss being dead and partially decomposed sphagnum moss.

(e) An article downloaded from the CANADIAN SPHAGNUM PEAT MOSS ASSOCIATION titled, "SPOROTRICHOSIS", downloaded from their site on URL http://www.peatmoss.com, which states at the beginning of paragraph 2 - "...talking about sphagnum moss and NOT SPHAGNUM PEAT MOSS. Sphagnum moss is a living plant.... Peat moss, on the other hand, is ...aged...".

Based on the above-noted citations, it is clear that the skilled worker would not confuse peat or peat moss with sphagnum moss. Further, it would not be likely that a

skilled worker would use the terms interchangeably. In fact, the industry very clearly separates the different forms in all of the literature Applicant has found. It would be similar to stating that diamond and graphite are both forms of carbon; therefore, a pencil can be made using diamonds, or cut glass with a pencil.

The following comments are offered concerning the Examiner's citations:

(a) Ellegaard (U.S. 6,105,308). Ellegaard describes a wrapping material for a block body of growth material like peat moss. The drawing shows "sphagnum" but in Column 2, lines 15-16 it states "...sphagnum, i.e., peat moss...", clearly indicating that the material referred to is peat moss. Given the discussion above, one skilled in the art would not consider peat moss as encompassing nor suggesting sphagnum moss. Ellegaard does not therefore appear relevant in that the materials disclosed are clearly distinguished by those skilled in the art. Further, Ellegaard is directed to a wrapping material that breaks down over time in use - see lines 20 and 21 of claim 1. The present invention is directed to a self-supporting block of sphagnum moss, which in use is not designed to break down. Each of Applicant and Ellegaard appear to be directed to solving a different problem; therefore, Ellegaard is urged not to be directly relevant.

(b) JP 1157315, titled "BASE FOR PLANT CULTURE", (henceforth referred to as "JP1157315") refers to the use of peat or peat moss to form a compression molded culture base. The process includes drying peat or peat moss, disintegrating the dried material, mixing the peat or peat moss with an adhesive, drying the resultant mix then applying to a mold and compression molding. The present invention involves the use of live sphagnum moss, clearly distinguished from peat or peat moss of JP 1157315 by those of ordinary skill in the art. A process applied to peat or peat moss would not ordinarily be seen as applicable to sphagnum moss. JP 1157315 by itself does not appear to be particularly relevant. This is further confirmed as the Examiner combines Ellegaard and this reference to indicate Applicant's invention to be unpatentable.

(c) Langezaal et al. (U.S. 5,218,783). Langezaal et al. refers to an agroplug of an inorganic material, see Column 1, lines 45-46 where they state: "agroblock and agroplug satisfy these conditions if use is made of an inorganic soil type...", then goes

on to disclose clays, silts and sands as being unacceptable material. This indicates that organic materials had been rejected by the inventors. As the specification and claims specifically teach away from the use of organic materials, which sphagnum moss is, the use of inorganic (mineral wool) fibres with an inorganic filter is not comparable to an organic live plant material combined with a fibrous material. Nor would it appear obvious to one skilled in the art that a binder applicable to a totally inorganic soil mix would apply to an essentially organic product. It therefore does not appear that the process Langezaal discloses would be considered by one skilled in the art as applying to a sphagnum moss growth mix.

(d) The remaining citations do not appear to have been directly applied by the Examiner. However, the following comments are made for completeness:

Sakate et al. (US 5,421,123) discloses a vegetation mat that encloses a growth material with the cover being designed to decompose over time. There is no discussion of binding the growth material.

Bunting (US 3,990,180) discloses the production of hollow peat tubes, specifically polymerizing functional groups in the peat by adding various reagents and processing at elevated temperatures and pressures. Given the compositional differences between peat and sphagnum moss, there is nothing in this disclosure that would suggest the present invention.

Clendinning et al. (US 3,932,319) discloses a thermoplastic dialkanoyl polymer in combination with naturally occurring biodegradable materials. The key is the use of biodegradable thermoplastic alkanoyl polymers to create articles that can contain a germination material. Thus, this reference does not disclose nor suggest the self supporting growth block of the present invention.

Clifford (US 3,616,573) discloses a seed capsule that uses a two piece capsule to encapsulate seeds for easy handling. They are specifically designed to enable easy handling of the seeds for planting. No mention is made of sphagnum moss nor of forming a growth block, both important elements of the present invention.

Robinson (US 2,233,032) discloses an article filled with a peat moss and grass seed mix, such that the article appears to grow hair, which can be cut. There is no disclosure of any binding of the peat moss and grass seed. Further, there is no

indication that sphagnum moss could be used and the claims in fact require a "felted material" or mat of cellulose.

JP 55108444: The abstract discloses the composition of a hydrogel material designed to retain water for the growing of rice. It incorporates 10% to 50% wt. of a hydrogel into a base material. It does not disclose the binding of the base material into a moldable growth block.

JP 409313049: This discloses a mulching material designed to prevent soil erosion by binding an organic granular or chip material with a binder. It does not mention sphagnum moss, which may be seen as fibrous but not chip like or granular. The only relevance appears to be the mention of a vinyl acetate based adhesive used to bind the mix.

JP 411131478: This appears to relate to a water holding blend of materials which includes clays, vegetable material and a synthetic binder which may include peat moss, in which the synthetic binder is used to harden it. It does not disclose the use of sphagnum moss or the moldable characteristics of the present invention.

It is argued that none of the Examiner's citations are individually relevant.

The Examiner has rejected claims 1-3 and 5-8 under 35 USC 103(a) as being unpatentable over Ellegaard (US 6,105,308) in view of JP 1157315.

Ellegaard (US 6, 105,308) and JP 1157315 relate to the use of peat moss which, as indicated above, would not be interpreted as including sphagnum moss by one skilled in the art. In fact, one skilled in the art is likely to specifically reject sphagnum moss as an alternative to peat moss given the enclosed references. Thus, even if it were obvious to combine Ellegaard with JP 1157315, it would not disclose or teach the present invention, as the present invention is directed to a novel product of sphagnum moss.

Applicant does not believe it was obvious to one of ordinary skill in the art to combine those two documents because:

Ellegaard discloses a sphagnum peat moss plant block material held in a fibrous wrapper. The wrapper designed to break down in the soil over time.

JP 1157315 discloses a peat moss material 50% disintegrated then dried. This is then blended with EVA resin emulsion, then further dried. The resultant blend is compression molded. There is no indication of a controlled breakdown of the material in the soil; thus, no connection with Ellegaard. Peat moss as indicated earlier will not be interpreted as including sphagnum moss by one of ordinary skill in the art; thus, the process in JP 1157315 does not apply to the material of the invention.

The combination of Ellegaard and JP 1157315 is unlikely by one of ordinary skill in the art as they teach away from each other. This is because Ellegaard discloses a wrapping that is designed to break down over a period of time, whereas the EVA binder used in JP 1157315 is chosen to enable the peat moss to be molded into a stable shape.

If we are molding to form a stable shape, then we surely do not want it to disintegrate in a short time of use. Thus, we believe it unlikely that one of ordinary skill in the art would combine these two documents. Even if combined, the resultant invention would not be seen by one of ordinary skill in the art as applying to dried living sphagnum moss, the key ingredient of the present invention, due to the clear distinguishing of sphagnum moss and sphagnum peat moss by those in the industry.

The Examiner has rejected Claims 4 and 14 under 35 USC 103(a) as being unpatentable over Ellegaard (US 6,105,308) in view of JP 1157315 in further view of Langezaal et al. (US 5,218,783).

The combination of Ellegaard and JP 1157315 with Langezaal, who refers only to the use of an inorganic soil mix held together with a variety of binding materials, appears unlikely. The Examiner has highlighted polyurethane on Col. 2, line 22 as being an unacceptable thermoplastic adhesive to modify the growth medium of Ellegaard. This may be true as Ellegaard refers to the use of sphagnum peat moss, which has a greater tolerance for heat. Polyurethanes melt bond application temperatures are between 85°C and 140°C, which though lower than most thermoplastic melt bond materials, is still well above that acceptable for sphagnum moss. It would be apparent to one of ordinary skill in the art that the range of

thermoplastic binders mentioned in Langezaal would be appropriate for inorganic soil mixes. However, due to their melt bond temperatures being greater than 85°C, they would not be acceptable for sphagnum moss, as the moss is degraded by heat. Thus, given that the material being bonded is so fundamentally different in nature to the sphagnum moss of the present invention, we do not believe that the thermoplastic binding materials, or the process in the form described in Langezaal would be likely to be combined with Ellegaard and JP 1157315 by one of ordinary skill in the art.

It is argued the above combinations of documents do not disclose the invention of Claim 1. Since Claims 2 to 8 and 14 depend from Claim 1, neither are Examiner's objections deemed to be relevant to those claims.

Accordingly, the claims as amended are urged to particularly point out the invention and to avoid the Examiner's art.

A "Version with Markings to Show Changes Made" is attached hereto, along with a Change of Attorney Address.

Favorable consideration and passage to allowance are respectfully solicited.

No fees are considered to be due with filing this Response; however, if it is determined that payment of a fee is required, please charge our Deposit Account No. 13-0235.

Respectfully submitted,

By _____

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Version with Markings to Show Changes Made

A marked-up version of the amendments are shown below showing additions with underlining and deletions between brackets.

In the Claims:

The replacement Claims 1, 5 and 14 are as follows:

1. (Amended) A growing medium comprising a self-supporting block formed from sphagnum [material] moss bound together by a binding material dispersed through the sphagnum [material] moss, said binding material being a compatible adhesive [as hereinbefore defined].

5. (Amended) The growing medium as claimed in claim 1 further comprising fibrous material dispersed through the sphagnum [material] moss.

14. (Amended) The combination of a growing medium as claimed in any one of claims 1-[8]7 and a support tray, said support tray providing one or more apertures, the or each aperture being adapted to receive the growing medium and being surrounded by solid white walls; the top and base of the or each aperture being open.